

Science und Arts.

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS.

No. 257.

SATURDAY, DECEMBER 4, 1858.

PRICE 11d.

# THE BANKS AND BRAES OF BONNIE DOON IN A NEW ASPECT.

THERE was a time in the history of this little globea very long time ago-long before any human beings lived upon it-when an enormous vegetation prevailed over many parts of its surface. Not only did no human beings then live on earth, but no mammalian animals of any kind-no birds even-nothing higher than a few reptiles, the chief population of our world then consisting of fish and other seaanimals. From the vast tangled woods huge loads of vegetable ruin were continually carried into the seas, and straits, and estuaries, there to rot, and in time fall to the bottom, and form a bed or layer; a process, however, which accident was constantly interrupting, for the same sea would now and then receive for a considerable space of time together only sand, or mud, which also would fall in beds to the bottom. So, in short, were formed those alternating strata of coal, and sandstone, and shale, which we see in what we now call a coal-field. This, however, was not all. Vegetation contains an infusion of iron. When the débris of the ancient forests was decaying in the sea, the iron became a solution in the waters. Now a small animal dying amidst such a solution, or even a leaf decaying in it, becomes a nucleus around which particles of the metal are gathered. is formed a nodule or pebble, containing iron, mixed with clay, carbon, and other substances. And when many of these are formed at one time, they compose a bed by themselves-a stratum of ironstone, alternating with those of coal, sand, and shale already

Inconceivable spaces of time elapsed. The great business of nature went on. There were no longer such vast forests; but other matters were strewn over the sea-bottoms; birds and mammals came gradually into the world. Sea-bottoms became dry land, and dry land was every now and then getting once more submerged. Great changes took place on the surface, chiefly by the action of seas and rivers. One of the last great operations-last in geological time, but still to us a vastly remote event-was the passage of a glacial sea, an immense ice-pack, over much of the present land-surface of the northern temperate region, sweeping off great quantities of the softer rocks, excavating valleys, and generally producing that flowing and undulating outline of the surface which we now see, leaving also a thick bed of clay and blocks-its spoils-strewn over the ground. Then came calm, ordinary seas, laying down beds of

clay and sand, and rivers depositing silt and gravel, and finally the present surface, and Man to occupy it.

Even after all this long history was past, there was another long one to enter upon—the province of the archæologist and the historian. All is progressive in nature, and nothing is more progressive than man himself. Ages elapsed, during which he was only wakening up into intelligence, and spreading his thin bands over the wide empty world. He at first could only fashion a stone or a flint into an implement for his hand. But one day a bright genius arose, who found a better substance for the making of toolsnamely, copper: he saw that this wanted hardness; so he mixed in tin or zinc, and made bronze. Bronze was the first metal used by man. A long period of comparatively respectable barbarian-life passed, with bronze swords, and ornaments, and tools-much fighting, little gentle morality, social arrangements only But brighter minds were continually rising here and there in the mass; and one of these detected the existence of a far harder, yet equally ductile metal, which he could melt by heat out of what appeared a mere mass of hardened clay. This is IRON. A long iron period succeeded, being, generally speaking, that over which written history extendsnamely, the last three thousand years. In this time, as most of us know, great advances were made in arts; vigorous nationalities and political fabrics were established; intelligence increased; morality improved, yet without seeing human society brought to anything like a satisfactory point. All we can say is, we are better than we were, and hope to be a good deal better yet.

One thing very striking, very arresting, in this history, is the intimate connection which we see between that metallic solution which long ago gathered around the little dead creatures in the Carboniferous seas, so as to form a bed of irony clay at the bottom, and the advance of man in his grand mission of acquiring a mastery over the elements of Without iron in the past ages of history we never could have had efficient tools of any kind; consequently we must have remained in a comparatively rude and mean estate. This is a most signal fact; but we now have another fact still more remarkable. Till the present age, iron has been a child: it is now a full-grown man. Somehow our fathers did not get at it very easily, and only got it in small quantities. We get it as twenty for one, and apply it to purposes of which our fathers never dreamed, to vast complicated engines for effecting labour, to the making of railways and locomotive engines, to the construction of ships, and even of houses. It may be said that that addition of power which the savage obtains when he becomes possessed of a knife or an axe, is but a faint type of the addition of power which society has obtained within the last thirty

years in its increased production of iron.

Now, Iron is a great bounty of the Creator; but it is not equally a bounty to all. Where it exists otherwise than in connection with coal-beds, and men are dependent on forests for the means of smelting it, it cannot be realised in large quantities. Where Nature's more happy arrangement exists, the ironstone and the coal laid in alternate layers, as if the one had been from the beginning intended to be used in connection with the other, vastly greater quantities can be produced. But the Carboniferous Formation is very partially distributed over the face of the earth. Fortunately, it abounds in Britain and America; the Civilising Metal is chiefly in the hands of those nationalities who are most disposed to the pursuits of peace and civilisation. In 1845, Great Britain produced 2,200,000 tons, being about equal to the entire quantity produced in the rest of the world. Rather oddly, valuable as the metal is, its discovery has proceeded with a surprising slowness, even in those districts in which it is most plentiful. Thus it was not till after 1830 that the rich seam called the Black Band was wrought in the west of Scotland; nor till 1845 was this known to extend beyond a space of eight or ten square miles. At the present time, this field ranks with the old ones of Staffordshire and South Wales, which were previously the most important in our country. It has been a source of astounding wealth to individuals, a great commercial support to the city of Glasgow, and a means of introducing a totally new aspect of things throughout a large province.

Even in what are called the Lowlands of Scotland, there are large tracts of country almost wholly unproductive, and consequently very thinly peopled. One sees a wide moor, with only here and there a poor cottage; or a valley with low rounded hills, in which there are but a few pastoral farms. The sheep and the curlew are the conspicuous animals, with now and then the variety of a grouse or a black-cock. It was in such wilds in Lanark and Ayrshires, during the reigns of Charles II. and James II., that the sterner Presbyterians dwelt, who gave Claverhouse and Dunbarton's dragoons so much unpleasant duty. Now-a-days, if you chance to wander into one of these wildernesses, you will be apt to find it bristling with coal-works, and glaring with blast-furnaces, while long rows of stone-built cottages speak of a large industrial population, probably knowing very little of the 'covenanted work of reformation' beyond what the once lonely grave-stone of the martyr will tell them. Such is an Iron Field, a rough, and, in some respects, a repulsive scene, but one associated with some of the greatest doings now going on upon earth. Let us briefly look into the details of one such

district.

Through the southern part of Ayrshire, the river Doon pursues a course of about eighteen miles, from a mountain lake to the Western Ocean; presenting in its lower part those lovely scenes amidst which Burns was born, and which he has celebrated as the 'banks and braes of bonnie Doon;' further up, shewing us only the usual features of a pastoral valley. Eleven years ago, the sheep reigned undisturbed over these long swelling uplands. But it was found that in valley there is a great depth of the Carboniferous formation, containing several rich seams of ironstone mingled with the previously known coal. The consequence has been the planting of a great work in the district. Far up the hillsides, beside

the once retired little farm-stead, rises the machinery for digging coal and iron. At one convenient spot lower down, are five blast-furnaces continually vomiting forth their arrowy flames mixed with smoke. A plexus of railways for carrying the coal to, and the iron away from, the furnaces, pervades the ground. Groups of cottages are interspersed, affording shelter for a totally new population numbering two thousand six hundred, for no fewer than eight hundred men are employed in this work. Thus it may well be supposed that there are some new moral, as well as physical and mechanical, results to be looked to in connection with the Dalmellington Ironworks.

in

of

o

y

81

n

A

n

t

a

h

C

8 6

7

A blast-furnace is a conical tower, fifty feet high, with four apertures near the top, through which fresh supplies of coal and ironstone, in a certain proportion, and with a small quantity of limestone in addition, are every now and then poured in from a gallery of the same height connecting with a platform on which these materials are collected. Through an aperture near the bottom, the refuse clay, fluxed by the lime, is run off at frequent intervals in a vitreous slag, which being of no use, is carried away, and thrown over a spoil-bank. A lower aperture, opened once in twelve hours, emits the pure melted metal, which, running along a channel of sand, fills up a close range of furrows of about a yard long, making, perhaps, as much as twenty tons in all. Most people have heard of pigiron, or pigs of iron, with little idea of the origin of the term. It arises from a resemblance borne by the longitudinal channel and its numerous close-laid branches, to a sow and her many sucklings; the iron of the long channel is the sow, that of the cross channels the pigs. It forms a striking sight, one that would bear painting, to see a casting at night, when in one place the red lava-like stream sparkling on its way along the black ground, while in another, the dark figures of men pass about among the burning bars, turning them up out of the sand for hastier cooling. From each furnace there will be upwards of two hundred tons of iron produced each week; thus a thousand from the Dalmellington work in all; to be distributed, some of it to form railways in India, some of it to form railways in America, some to be used nearer home. At our visit to the work, we observed a great quantity of smaller bars lying about, and learned that they are sent to the south of Spain and Portugal, to be placed in the beds of rivers, where the copper in solution in the water takes the place of the iron; and so they end by being transformed into another metal. This amount of transformed into another metal. production is immensely beyond what was practicable in former times. Within the last twenty years, Neilson discovered that hot air blown into the furnaces saved coal and also time. Each furnace is therefore now provided with side-furnaces, containing iron air-passages, by which air, forced in by the pumps of a powerful engine, is raised to a tempera-ture of 600° Fahrenheit before it touches the metal. The result is an immense stimulus to the trade of making iron.

The iron-workers, coming at first as strangers into a thinly peopled country, have all along continued in a great measure isolated. They therefore form an interesting problem in social life. The great bulk of interesting problem in social life. them live in three hundred houses which have been built for them by their employers, the rest resorting to two villages at some distance. Now, these houses are neat, cleanly, comfortable dwellings, such as no person whatever would find it a hardship to live in. Most of them consist of two rooms, with a scullery, and many are provided with small gardens. They are rented to the men at the rate of sixpence per room, being enough to return merely a moderate interest for the outlay, the object being not to make a profit, but to subserve the conveniency and comfort of the men. Our conviction is, that these houses are superior in every essential respect to the great bulk of the dwellings used by the middle classes sixty years ago. For the convenience of the people, the masters have also a store, where all kinds of necessaries of good quality are sold at fair rates for ready money—a singular establishment, which reminded us much of those of the kiopmen of Norway and Iceland. A light ale is among the articles dealt out here; but no spirituous liquor is sold; neither is there a publichouse in the district of the works-none nearer than two miles in one direction, and four in another. From this restriction we did not find that any evil effects arise. The people are generally a sober people; indeed, one has but to look at the comfort of their houses, the sound, clean clothes of the women and children, and the decent appearances everywhere, to make sure that comparatively little of their gains goes along the black road which leads to the whiskyshop. A stoppage from wages of twopence per week for married, and one penny for single men, supports a good school, where the head-master has L.120 a year, being 50 per cent, more than the average remuneration of the parish schoolmasters of Scotland. A further small stoppage fees a medical practitioner. The masters engage the services of a missionary, and the formation of a library has been encouraged. Thus the physical and moral wants of this little community are provided for, partly by arrangements of a liberal and judicious nature on the part of the employers, and partly by the contributions of the employed. The effects appear to be most satisfactory. From the desirableness of a position in these works, the masters are enabled to take select men, and so make their employment still more desirable; for of course it is important for a respectable workingman that he and his family should have worthy people to associate with. Hence it has arisen that when colliers were striking in neighbouring districts, no tendency that way appeared in the Dalmellington works. We felt much interested in learning to how great an extent the masters and manager attribute the happy terms on which they stand with the men to the good dwelling-houses. It appears that a good comfortable house to live in, is the very first element in the necessities of a working-man. He feels that no other external circumstance contributes so much to his happiness; and we must sadly acknowledge that there is no other thing he can regard as so uncertain of realisation, in the event of his making a change. Where good houses are, therefore, there may we expect-other things being equal-the best and steadiest men to be gathered together.

We spent three days in this singularly planted scene of industry, studying the mysteries of iron-mining and hot blast, and the condition of human nature generally in connection with the making of iron, and the whole subject left a gratification on the mind which but rarely results from a country visit. It appeared to us, finally, as if we sometimes attach more than enough of consequence to the observations of travellers on distant countries, and too little to what is going on in many districts of our own. Here is a little tract of ground, transformed in a few years from a pastoral valley to a great manufactory, sustaining thousands of people, and contributing largely to the national wealth. It is but a specimen of a whole province, equally metamorphosed in the last thirty years. Were there such a rapid development thirty years. Were there such a rapid development of wealth and population in any part of the United States, we should hear no little of it: occurring in our own country, no traveller describes it. The fleet messenger was at once despatched for the stone-truth, however, is, that the west of Scotland is as American in this respect as America itself; and we the messenger was strictly enjoined to say.

need not look to New York or Cincinnati as a marvel, while we have Glasgow nearer home, expanding in sixty-five years from fifty to four hundred thousand inhabitants.

## A DEAD MAN'S REVENGE.

HOW IT WORKED AND HOW IT ENDED.

CHAPTER I .- THE REVENCE.

'OPEN the window, wife, and let in some air. Phew! this place is enough to choke one.'

It was a close, sickening atmosphere, truly. The chamber was dark and low, and on the old tester-bed, hung round with checked curtains, lay something covered with a ragged counterpane.

The speaker approached the bed, drew aside the soiled coverlet, and started back as he beheld a ghastly face, with eyes unclosed, and rigid jaws.

'Come here, Hannah-come here. Uncle Zebedee's dead!' The man spoke in a low tone, then turned and looked at his wife. She was a neat and gentle-looking woman; he, a fine, broad-shouldered man.

'O Richard!' The woman's face and voice ex-

pressed her horror at the sight before her. It was death in its most repulsive form. An old man, with pinched and withered features, with beard unshaven, and eyes unclosed, lay on that wretched bed, staring upwards, as though, hovering over his couch, he still beheld the awful presence that had announced his doom.

It was Zebedee Peck, the miser, who lay there, stark and dead; and the man, in a stone-mason's dress, standing by the bedside, was Richard Mallet, his nephew, a working-mason.

'God ha' mercy on him,' said the man, after a

silence, during which he and his wife stood gazing in awe on the face of the dead. 'He'll need it, poor soul! He hadn't much mercy for others.

Through the open windows came a murmur of voices from the court below; then there was a noise of footsteps on the stairs.

'Here are the neighbours, Hannah. Come, look up, lass. There's lots to be done.'

Richard Mallet threw the sheet over the face of the dead, and went to the door to meet the new-comers. There was a goodly troop, principally women. Curiosity was written on every face. Peck's Court had been in a state of excitement for some hours.

For two days past, the old miser's house had been shut up, and nobody had seen anything of its owner. At first, it was supposed to be only one of Daddy Peck's whims, and his eccentricities being well known, no one troubled themselves about the matter. The next day, it was reported, early in the morning, that the old miser had had a fit; by noon, it was said that he had hung himself in his garters from a beam in the garret; and lastly, towards evening, it was asserted that he had been murdered by thieves, who had plundered the house, and escaped over the back-wall. Whereupon, consultation was convened at the pump, by matrons of the court, as to what ought to be done under the circumstances, and various resolutions were proposed. One lady advised trying the effect of a watchman's rattle, and a cry of 'Fire!' under the window; another advocated a long ladder, and a descent through the garret; a third was for having a policeman sent for, and breaking open the front-door with the strong arm of the law; while a fourth, an enlightened washerwoman, suggested sending at once for Richard Mallet, Old Peck's nephew and nearest relative. This bright idea carried the day; and a

n

0

t

When, therefore, Richard Mallet proceeded to inform the neighbours that his uncle had been found dead in his bed, and nothing more, there was something like disappointment written on their anxious faces. The court had made up its mind to a terrible catastrophe -a suicide at the very least; and now there would be nothing but a coroner's inquest after all. However, with that to look forward to, and the question of the miser's wealth to discuss, it had gained something, and so the court recovered its equanimity.

'He's gone then, at last!' 'Well, we're all mortal, you see! 'His money's o' no use to him now!' were amongst the pious remarks uttered by the bystanders, as they crowded round the bed.

'Let's hope his money will go into better hands, marm,' said the intelligent washerwoman, addressing herself to Mrs Mallet. 'You mustn't fret, my dear; it's the ways o' Providence, and all for the best, you know.

Seeing that Mrs Mallet had never spoken to the deceased a dozen times all the twelve years of her married life, it required no great amount of resignation on her part not to fret. She was only pale and frightened.

'Go home, Hannah,' whispered her husband; 'I'll ee to things, and get these people away. Don't tell

Mrs Mallet made her way out of the house, an object of much interest to various members of the court, awaiting, at windows and on door-steps, her reappearance. It was a trying moment for the good woman. She was before a critical audience. If she carried her head erect, it would be attributed to her pride as the wife of the miser's heir; if she held it down, it would be taken as a hypocritical assumption of sorrow; if she made haste, it would be to avoid 'lowering herself' by talking to them; if she loitered, it would be to shew herself and receive homage. But Mrs Mallet cared little for the criticisms going on around her, and hastened home to get her husband's supper ready, looking neither to the right hand nor the left.

Richard came home before long. The hearth was swept, the supper ready, the boys in bed, and little Jessic, the lame child, sewing on her stool by the fire. The mason hung up his cap and coat behind the kitchen door, washed off the lime and mortar from his hands, and then, a clean-intelligent-looking man -came and sat down to his supper.

'Come here, Jessie,' said he, when the meal was

The child hobbled to him on her crutch.

'You remember Uncle Zeb, don't you?—the old man we went to see once, eh?' Richard kissed the child's forehead.

'Yes, father.'

'Well, he's dead, my girl; he's dead. Do you remember what he said to you that Sunday as we went to see him?'

'Yes. He asked me if I'd like to be a rich woman, and have a fine house, and go abroad; and I said no, because I couldn't help mother to sew, or get your tea ready then."

What else did he say?'

'He said: "When old Uncle Zeb's dead, my dear, you'll find he hadn't forgot you;" and then-then I

began to cry, because he grinned at me so.'
'Yes, it's true enough. That's what he said,
Hannah,' remarked Richard, turning to his wife. 'I
never said a word about it then, nor since, nor has Jess. It was better not. But he told me how as he had made his will, and hadn't forgot this child.'

Mrs Mallet almost dropped the loaf of bread in her hand, in her amazement.

'You don't think it's true, do you, Richard?'

'Can't say, my dear. He was cunning as a fox,

and deceitful as Old Nick. More likely he's 'a left it to a 'ospital. Anyhow, the will is found, and, as he'll be buried to-morrow, we shall know afore long."

M

an

br

w

w

W

ri

h

h

P

d

f

Richard Mallet seemed to take the matter very coolly. Not so, however, with his wife. The bare idea of their poor lame child inheriting any of the hoardings of Old Peck, the owner of nearly all the houses in the court, and the reputed possessor of an account at a bank in the city, was too much for her. The wildest hopes were excited in her mind; she could think and talk of nothing else.

'Well, Richard,' was her concluding remark that night, 'we've been very happy all these years, and yet we've never seen the colour o' his money; and, after all, we can do without it. If he should leave us anything, it won't be that we've been seeking for it; nobody can say that. We've had too much pride ever to demean ourselves by courting him for his money's sake; and ever since he abused you so, for marrying me, nobody can say you have cared to have

his favour.'

'You're right there, Hannah. If any of it should come to us, we'll know it's come as it ought. Don't be too sure on it, though. Uncle Zeb was just the man to play us a trick at the last. He never forgave, he always said.'

It was well, perhaps, Richard Mallet added these words; they were some little preparation to his wife

for the events of the morrow.

When the morrow came, and the miser had been laid in a grave hallowed by no tears nor tender memories, the will was opened in the presence of Richard Mallet and his wife, in one of the deserted rooms of the miser's house. Through the half-open shutters, a scant sunbeam streamed on the wig of the old lawyer reading the will, and made a track of dancing motes across the dusky air. Mrs Mallet sat on a worm-eaten chest (there was only one chair in the room, that occupied by the lawyer), and Richard, holding his hat in his hand, stood by his wife's side.

The old lawyer read the preliminary clauses of the will, to which both his hearers listened attentively; the one with respect for the big words, the other with a patient endeavour to grasp their meaning. executors appointed were two gentlemen living in a village in Kent, where the deceased was born. Though Zebedee Peck had drawn up his will himself, it was all in proper form. He had commenced life as a pauper-child in a Kentish workhouse, risen, through the progressive stages of hop-picker and errand-boy, to be clerk in a lawyer's office, and, finally, bill-discounter and money-lender in London. Consequently, Old Peck knew what he was about, when he made his last will and testament. He had prepared a surprise, however, for whoever should read it.

The old lawyer suddenly stopped, blew his nose, and glanced down the parchment. There appeared

to be something unusual in the document.

'All my real and personal estate, whatsoever and wheresoever'-repeated the lawyer with an uneasy sort of 'hem'-'I give and bequeath to-to-Jessie Mallet' (the parents both turned pale), 'the daughter of my nephew, Richard Mallet of Little Winkle Street, in this city, and this'-

The lawyer glanced over a few words further, and

then came to a dead stop.

'This is quite irregular—quite out of the course. Really I don't know; I think, my friend, it would be better your wife should step into the next room whilst I continue.'

'No, sir; go on: she can hear it,' said Richard. The lawyer, with a strange look at them both, resumed. 'And this is the revenge I have long pro-

mised myself. In leaving my money thus, may I be sowing the seed of estrangement between Richard Mallet and his child! May it place a bar between

them all their lives! May it divide their household! May it make the daughter ashamed of her father, and the father jealous of his daughter!'

Mrs Mallet put out her hand to her husband with a terrified face. Richard stood quite still, but his

brow grew black as night.

ll'e

Ty

ire

he

he

an

er.

he

ıd,

us

it;

de

nis

or

ve

n't

he

re,

fe

en

er

of

ed

en

he

of

in

d,

he

th

he

in

lf.

ns

ζħ

y,

d

d

e.

'May wealth be the curse to them it has been to me, and bring discord between kith and kin! It is with the belief that it can and will do this that I leave my money to Richard Mallet's daughter. "Illgotten gains never prosper," he once told me. Let him remember this—let him take it to heart now, when these same gains have become the legacy of his own child.'

The lawyer stopped, for Mrs Mallet had burst out weeping; but Richard was standing as before, though with great drops of sweat upon his brow, and his

wife's hand clenched tightly in his.

'Them is words, sir, as nobody as a right to use, said he, in a low, hoarse voice-' them is words as 'ull rise up in judgment again him one day. Sooner than have one penny o' his money now, I'd—don't pull my hand, Hannah; I know what I'm a saying—I'd see my wife and children lie dead in the streets. Look here, sir-look here; that was Uncle Zeb's work!'

The man had suddenly bared his arm, and was pointing to a ring of livid flesh that encircled it.

'When I was a lad, he hung me up by that arm, and beat me with a rope, because I wouldn't do his dirty work. I forgave him that though, years ago, for I got on in the world without him, and got married, and was happier than he had ever been. But now that he tries to set my own children agen me, as he once tried to set me agen my wife, I wish the Lord may '.

'O Richard, don't, don't!' His wife put her hand upon his mouth, and stayed the curse upon his lips. 'Don't say them bad words; don't, Dick, don't. Remember what you tell the boys always.

poor man!'

She clung to her husband's shoulder, and wept there.

'You're right, my lass. I preach, but I don't practice.

Richard Mallet drew a deep breath, passed his hand over his wet brow, and sat down on the chest, with the veins all swollen in his face, and his limbs trembling with the efforts to subdue himself.

'Is there anything more to read, sir? I'll know it

if there be, if you please.'

'No; nothing but the usual clauses for giving proper power to the executors-mere matter of detail,

replied the old lawyer, apparently very ill at ease.

'Then, sir,' said Richard slowly and deliberately, 'I'd like to say once for all, in the presence of you and my wife as witnesses, that I 'erby refuse to have, and renounce, for me and for my child, every farthing o' this man's money.

Richard uttered the words as solemnly as though they had been a proper legal oath of renunciation, and then, with a look of relief, got up and kissed his wife, 'Don't cry, my woman; we'll be going our

way home again.

Yes; better do so, perhaps—better do so, Mr allet,' said the lawyer. 'But I must remind you that-that the property of the deceased is left to your child, and not to yourself. It is in the hands of trustees. You cannot, therefore, renounce what is not your own. However, we'll talk matters over together to-morrow, at my office.'

The cloud that came over Richard Mallet's face at these words did not disappear again that night. He went home in silence, nor spoke one word to his wife

all the way.

For the first time in his life, he drove Jessie away from him, when she brought her stool and knitting

to sit at his feet; and, for the first time since they were born, the boys went to bed without their father's kiss.

#### CHAPTER II.

#### HOW THE REVENGE WORKED.

Richard Mallet never closed his eyes that night. He got up at six next morning, had his breakfast, and then, as though nothing had happened, went and did half a day's work before going to the lawyer's

His wife stood and watched his manly figure as he strode down the street in the blue light of early morning, with his tools on his shoulder; and then, as he turned the corner, she went back to her fireside, and sat and cried as though her heart would break, till the milkman came round with the morning's milk.

It was a long day at home. Jessie wondered what made her mother so sad and absent, and why she sat

and looked at her so strangely at times.

'Are you angry, mother?' asked the child once, as she caught one of these looks fixed upon her.

'Angry, bairn? Don't talk-don't talk. Perhaps it would have been better you'd never been born, my poor girl. The Lord only knows;' and the mother turned away from her little daughter with tears in her eyes, and a foreboding heart.

When Richard came home, his wife saw by the expression of his face that the matter was decided in

some way.

'Hannah,' said he, laying down his tools, and wip-ing his forehead with a handkerchief he took out of his cap-'it's as he said. Our child has got this fortune, and we can't take it from her. He tells me Jessie is worth twenty thousand pounds!'

'Twenty thousand pounds, husband! Twenty thou \_\_\_! O dear, dear.'

The poor woman laughed and cried in the same breath. Twenty thousand pounds! It was impossible not to rejoice. Uncle Zeb's maledictions were forgotten for a moment, in the dazzling visions those words raised before the mother's eyes.

'Call Jessie here,' said Richard, sitting down.

And Jessie came to her father's chair, and looked up wistfully into his face. It was something new to feel afraid of father; but Jessie did feel so, as she beheld the way in which he looked at her.

'Jessie, my girl, I want to talk to you,' began Richard. 'Now listen to what I am goin' to say; you're a 'cute little lass, and can understand me, I know. Uncle Zebedee's will has been opened, and we find he's left all his money to you. You'll be a very rich woman one day, Jessie, and you'll have The pale face of the child flushed, and her eyes sparkled.

'You're very glad, Jess, ain't you?'

'Yes, father, I am glad. Shall we have a home of

our own, then, and a garden?' 'Yes, you will. And you'll wear fine clothes, and live with grand folks, who are a deal cleverer than father and mother.'

'But I shan't leave you,' said the child, with a

quick grasp at her father's hand.

'Not for always, p'raps; but you must go to school, and learn of somebody who can teach you better than

Richard Mallet's face twitched as he thought of the old spelling-book over which he and his child had spent so many happy evenings. They were at an end now. But, looking at his wife, he went on:

'Yes, we musn't keep her like ourselves, Hannah. She must have good schooling, you know. She must be different from us.'

Jessie stared at her parents with her big brown

eyes, and her heart beat fast. She was a clear-headed reasoning little creature. The life which she had been compelled to lead in consequence of her infirmity -an infirmity more the result of a delicate frame, than actual disease—had quickened her intellect, and rendered her wise and thoughtful beyond her years. So she shed no tears, though her heart was full, but took her chair out of her father's sight, and plied her needles fast in silence.

That night Richard Mallet and his wife sat by their fireside till long after midnight discussing the fortunes of their child. At one moment, the poor mother thanked Providence for Jessie's good-luck; at another, she shuddered at the thought of the curse

attached to the miser's wealth.

'O Richard, if his words should come true. our child should grow to be ashamed of you and me!' 'Hush, Hannah!' Richard checked his wife angrily. 'It's only like a babby to talk i' that way. How

can a dead man's words do any harm!'

Though Richard assumed indifference to his uncle's malediction, it troubled him in reality. thing on waking, the old miser's terrible words occurred to him. All day long, as he plied hammer and chisel in the stone-yard, fragments of the curse sounded in his ears. As he sat at dinner, under the shed, he found himself mechanically tracing in the dust, with the end of a broken tool, the words: 'May it place a bar between them all their lives.' Many a night did his wife hear him sigh in his sleep, and mutter and moan about 'the gold' and 'my own bairn.' But by day he would rebuke his wife for being affected by superstitious fancies, and tell her she ought to know better than to trouble herself about such things. He would not have owned for the world that these same fancies were haunting him, sleeping and waking.

Richard Mallet was a man of resolution and few words. When he had decided on doing a thing, he did it at once. So, having come to the conclusion that his child must be brought up as befitted her altered circumstances, he lost no time in lending his

aid to carry out the necessary changes.

Ere six months, Jessie Mallet was the inmate of a handsome home in a boarding-school in Kent, near one of her trustees; and the stone-mason and his wife had returned to the life they were leading before

the death of Zebedee Peck.

It was not the old life, though. Richard was as steady and industrious as ever, as good a workman, as kind to his wife, and as fond of his two boys; but there was a change in him. It was not that the new position in which he now stood towards his master, his fellow-workmen, or the world, perplexed him. He was not the man to disquiet himself on that score. He held up his head as before, worked hard, took a joke good-humouredly, brought home his earnings every Saturday, and never troubled himself about what the neighbours thought or said as to his affairs.

It was at his own hearth that this change was to be seen; at his own hearth, where, when he taught the boys their letters at night, he missed a gentle little voice in his ear, and a soft little hand in his; where his eye often rested on a chair that stood vacant in the corner, with a little crutch by its side. At such times, he would grow hard and stern. There was not the influence in these things that clings to tokens that remind us of the dead: they only recalled a separation founded on injustice and wrong. Uncle Zeb need have prophesied no further; he had already obtained a cruel revenge. The very fear of his curse ever being accomplished was enough to embitter the rest of his nephew's life.
'Hannah,' said Richard Mallet to his wife one

Friday morning, 'I shan't be home to-night, nor

mayhap for these next three days. I'm going to see

He kissed his wife, put on his best hat, placed a stout stick and a small bundle on his shoulder, and went away. Jessie had been gone nine months.

vo

in

hn

ha

H

he

ti

t

On Tuesday night, his wife stood at her door looking out anxiously for his return. It was nine o'clock, but warm and fine, and the month of June. Ere long, in the dusky twilight, she espied a toil-worn man coming slowly up the street. A neighbouring lamp shone on the man's figure, as he approached. Hannah started as she caught sight of her husband's face. It was so worn and jaded, she hardly knew him.

'Gi'e me a sup to drink, Hannah,' said Richard, when he had entered the house and sat down.

The dust upon his dress shewed that he had made

It's a long spell to Canterbury, you see, and I his wife should understand that the cause of his

fatigue was physical.

He took a long draught at the mug of beer, put it down, and then, with his elbow on the table, and his head resting on his hand, said: 'I can't touch my supper yet a while. I'm dog-tired. I'll tell you all about my journey, now, and then we've done with it.'
He took off his hat, loosened his neckerchief, and then, without raising his eyes to his wife's face,

'Hannah, I have seen our child. I have been down to Canterbury, and seen the place where she lives, and the company she keeps. But though I've seen her, she ain't seen me; I hadn't the face to shew mysel' arter all. When I got down yonder on Sunday afternoon, and see the grand old house she is livin' in, nigh by the cathedral, and the young ladies walkin' in the garden, I said to mysel': "It will never do to shew yourself there, my man;" and so I made up my mind I'd come back as I went, without even a word or a kiss, and be satisfied if I could only clap eye on her for a minute. So I watched about the house till they all come out two and two to go to the cathedral close by, and then I saw my child, hand in hand with a lady in silk, who walked at the head o' the line. She seemed kind o' gentle with our little girl, and helped her on a bit, for she couldn't quite keep up with the others; and Jess looked up at her as though she liked her, and wasn't afraid. I kept my eyes on her, and followed after 'em up to the church-door, and when they went in, I seemed to be drawn on like, and went in too, as though I couldn't do other. It's a brave place is that cathedral, and lots to see in my line; but I could only look at one place all the time, where she was sitting among the ladies, looking just as quiet and as good as I've seen her look a score o' times a sittin' in yon chair.' He paused a moment, then went on. 'You should have seen her eyes, Hannah, when the organ was playin'! She was happy then, I warrant. I minded to sit on a back bench where she couldn't see me, and there I watched her, whilst they played and sung, till, all at once, I felt I was going to choke, and then (God forgi'e me!) I rose and walked out of the church, with a curse upon my lips. I would have set off home then and there, but somehow I couldn't tear myself away. I saw them all come out of church again, and go back to the big house, and I loitered about the iron gates, hoping I'd see her again in the garden, or at the windows, but I didn't. A servant came out, afore long, looking very smart and tidy; and, thinks I, I'll just ask him how Jessie is, and what she's a-doing of now; but when I went up to him, he stared at me in a uppish-sort-of way, and so I only asked him what o'clock it was. I'd half a mind to ring the bell, and go in, after all; but every time I looked at my dress and my bundle, my heart failed me; so I turned away at last, and came back as I went, without ever hearing the sound of my bairn's voice. Perhaps I was a fool, and ought to have gone in without fear or shame, as an honest man should; but the Lord knows I'd rather have come back as I have, than seen her look ashamed o' me, or brought a blush to her cheek. I couldn't ha' borne that,

Richard Mallet's voice sank as he uttered these words, and his great hand trembled as he bent his head over the table. The spirit of the man seemed

bruised and broken down.

For many days Richard Mallet repented of the sacrifice he had made, and upbraided himself for ever having allowed his child to be removed from him.

'Why did they ever permit this unnatural separa tion to take place?' the parents asked themselves. 'Jessie would never be theirs any more now,' said the poor mother. 'They had better forget their own

By the time she had finished her schooling, she'd be no company for such as them.'

Richard was the first to regain right feeling on the

subject.

I

d

'Hannah,' said he one day, 'we've done our duty, and it's no use talking. Jessie must be brought up as she should be, and you and me ought to be the last to stand in her way. I promised her trustees we'd be no hindrance to 'em, and we ain't goin' to break our word.'

When Richard spoke thus, he looked more cheerful, outwardly, than he had done for many a day.

Whatever fears and anxieties he might have, they were henceforth to be confined to his own breast.

To be concluded in our next.

## BILL FUSTIAN'S RUNNING COMMENTARY ON THE DOINGS OF THE RESPECTABLE CLASSES.

THE sins of the respectable classes do get now and then found out, and very bad they appear. I suppose we might have all gone on eating peppermint lozenges for ever without knowing what a horrible mixture they are, but for that shocking case at Bradford the other day, when nineteen or twenty people lost their lives by eating such lozenges in which arsenic had been mixed. Well, nobody meant to put arsenic into the lozenges. The arsenic was an accident, on which I care not to comment at present. But see what was really meant to be done. The intention was to mix in with forty pounds-weight of sugar-the proper material -twelve pounds-weight of a stuff called 'daff,' which is nothing but a white earth; arsenic, in short, having been, through carelessness, substituted for 'daff.' Thus it comes to light that these respectable people are accustomed to make us buy lozenges more than a fourth part composed of mere dirt! So do they not scruple to fill our stomachs with trash, that they may fill their own pockets with money. Always the same story among that sad set of people—cheating, lying, poisoning, anything for gain! Always professing, too, to be so shocked by the habits of those wicked lower orders; adding insult, I may say, to injury. I wish they would learn to take the beam out of their own eye, and see that it is not a false beam.

They would all cut each other's throats at any time for twopences. See the conduct of that great omnibus company, which, having six hundred omnibuses constantly going in the streets of London, from which it draws a revenue of six hundred thousand pounds a year, cannot endure the existence of one poor little rival company, which has only fifteen buses, but of an improved description. Wherever one of the Saloon omnibuses, as they are called, appears, four or five others belonging to the older

company beset it closely on all hands, to prevent the public from entering it. This is called nursing the Saloon Company's buses. Fine nursing truly it should rather be called overlaying. Another means of destroying the rival company was to bribe small shareholders to vex it with legal and other difficulties. One states that he was thus engaged for a consideration of fifty pounds (never paid) to file a bill in Chancery for the purpose of getting this poor little Saloon Company wound up-a scheme, however, which did not succeed. A shareholder in the big company who had been particularly active in these proceedings, congratulated his friend that the Saloon Company could not keep on—their horses were dying like rotting sheep, and they had not a penny in their coffers to help themselves with: he was working day and night, he said, against them, and he would sell his coat off his back to get them crushed. Amiable feelings these for one of the respectable classes to indulge in. One would have thought that a body drawing six hundred thousand pounds a year would have been at such ease in their minds as to profit, that they could have afforded to allow the small fifteen-'bus company to live. But no. Great as may be the gains of these respectable people, their necessities are always greater. And, while professing that there is nothing like a fair competition, they would all prevent competition in their own case, and by any sort of means, if they could.

Nearly three hundred years ago, in what we consider barbarous times, a gallant knight dying on the field of battle, had a draught of water brought to him to quench his raging thirst. As it was rising to nim to quench his raging thirst. As it was rising to his lips, he saw a poor soldier who was dying also, and who cast a longing look towards the draught of water. The knight immediately sent the water to the soldier, saying: 'Poor fellow, his necessities are greater than mine.' Men will ever bless the name of Sir Philip Sidney for this act of lofty self-denying benevolence. How refreshing, how encouraging to all in Christian unselfishness, is this tale! Contrast the conduct of a modern trading company, trampling down their fellows in the pride and might of an over-whelming greed. What a pitiable state for middleclass respectable human nature to be reduced to. Oh, my horny-handed brethren of the workshop, let us all pray to be saved from necessities, real or fancied, which prompt to such feelings and such actions.

The effrontery of some of the great money-consumers and appropriators of the middle classes is most remarkable. There were seven Glasgow firms —infirms they should rather have been called—who drained the Western Bank to the extent of one million and thirty thousand pounds, all to carry on business upon false principles, in the desperate hope that something would cast up in their favour. These men, while yet standing, destroyed the means of livelihood of hundreds of honest people in their own several lines, because there is no competing with men making a desperate use of other people's money. When they fell, they involved hundreds of other people, bank-shareholders, in misery. There is but the crust of dependence to-day to many who were living in comfort a year ago, in consequence of the superb selfishness of these speculative traders. But men of this sort, when they become bankrupt, only think themselves unfortunate. It probably appears to them, that the only cause of the mischief is their not having got quite enough of 'accommodation.'
Only have given them a continuance of the proper 'banking facilities,' and they would have kept their Creditors are overawed by the very granground. Creditors are overawed by the very gran-deur of the ruins which such men make, and are easily forced into settlements advantageous to the debtors. Indeed, an insolvent of this species is rather like a free and independent man negotiating a transaction in his own favour, than a bankrupt called to account for his shortcomings. It would be a strange thing, indeed, if he were not able to clear out with a tolerable wreck of stock wherewith to begin the world again.

Accordingly, it is not surprising to be told, as we are, by a local print, that these men have been living since the crisis of November 1857 'in first-rate style, in elegant mansions, with trim servants, and plenty of them, travelling every day in first-class railway carriages to their country-houses,' and that the greater number of them 'have resumed, or are about to resume, business in Glasgow, just as if they had been innocently knocked over in a commercial storm which they had no hand in raising.' One is stated to be rearing a new building for business purposes at a cost of L.8000. Verily, these respectable classes are very merciful to each other in misfortune, especially when this is deepened by a shade of guilty extravagance and folly. I wish they were as tender to us, when we pick up a hare or go to

the union for temporary relief.

I am told of another set of respectable people, men driving gigs, or better than gigs-decent family men who seem duly anxious to get to a good instead of a bad place hereafter-who are known to have sold out of this bank at dates remarkably near to that of the stoppage, when some knowing people were beginning to be tolerably well assured that there was danger in the wind. Clever dodge this, getting all the rich dividends, and when no more were to be got, but retribution was about to be called for, handing over the concern, like the bottle-imp, to a neighbour. It would be interesting to get a return of the number of widows and other helpless ignorant people who losed upon as quite a proper kind of transaction in respectable middle-class society; but I know that Tom Corduroy, Dick Moleskin, and myself, are all of a mind in thinking that we should be under the beautiful to the control of th mind in thinking that we should be unfit to be spoken to in future, if we had acted in such a manner. It is all taste; but really I feel a sort of pity for these respectable people, who love money so much that every action by which it may be made or saved seems allowable, provided only the law has nothing to say upon the subject.

# TWO LETTERS FROM THE LEVANT.

LETTER I.

Scro, Monday 14th.

WE have sailed over the long blue waters thus far, and are anchored off the old Genoese fort at Scio. We landed this morning at a rude sort of mole or breakwater, the harbour inside being hardly deep enough to receive the caïques of the natives themselves. A small Greek population has here established itself, and rebuilt a portion of the beautiful city, with warehouses for the island's exports, consisting principally of olive-oil, silk, and gum-mastic. Previous to the calamity which fell upon this devoted spot-the entire destruction of the place by fire and sword, in consequence of its connection with the Greek patriots of 1822-the whole of a space of six or seven miles in extent, lying between high and rugged mountains of a whitish rock, and the winding beach of the strait betwixt Scio and Anatolia, was thickly populated, and the resort of the chief merchants of Smyrna. To Scio, where lay their domestic treasures, they repaired to enjoy such leisure as business left them, and the fruits of a life of labour in old age. There stood their

luxurious habitations amidst fields of flowers, shaded by the peaceful olive, and perfumed by the orange and the lemon-tree. Scarcely a sign of this magnificence remains; but in a convent not far south of the town, where 7000 of the flying Sciots were put to the sword, the bones of the dead still whiten the ground, and the deep sabre-cuts in the decaying skulls still witness against the Turkish tyrants. In revenge for this destruction, the Greek admiral, Canaris, found means to sink the ship of the Capitan Pacha, with all the plunder of Scio, before she left the roadstead. Although the divers have descended again and again, and company after company has been formed for the recovery of the treasure, the gold and the silver, and the guns of brass still enrich the floors of ocean, twenty-seven fathoms beneath the surface. Wandering through rich orangegroves and a still flowering wilderness, we came upon 'Homer's School,' where the blind old man of Chios is said to have taught his pupils about 3000 years ago. Some antiquaries prefer considering it as the Temple of Cybele; but, certainly, whether for poetry or religion, I never saw a place more fitted and peculiar. The Straits of Scio, and the isles that stud them, lay beneath it; the masses of white rock gleaming from far-off Samos inclined to azure in the haze; and, mystified by distance, rose the rugged Mimas, precisely as it used to do in the Metamorphoses of Ovid. The air of Scio is the healthiest possible, and the climate perfectly luxurious. The labour of the female population at least, is confined to making silk purses, chewing the aforesaid gum-mastic (masticating), and distilling the sweetest of waters from orange-blossoms and the flower of the jasmine. Mastic is said to whiten the teeth and strengthen the stomach, and the groves which produce it are well worth visiting.

To-day (15th), we sailed into the Gulf of Smyrna, and made an expedition on its south coast to the baths of Agamemnon, mounted, like the sons of the prophets, upon asses. These animals in this country are either better taught and managed, or are not so obstinate and evil intentioned as in our own, where it always seems that some invisible power obstructs their way. Mounted on asses, then, we blush not to confess we were, for they are the chief riding animals now in the East, even as when one of Israel's judges had thirty sons who rode on thirty asses, and they who were thus mounted ruled over thirty cities. Near Vourla, here there are three remarkable hummocks, called 'the Sisters,' separated from 'the Two Brothers' of the same family by a deep ravine, through which runs a rivulet. Here are situated these famous baths. A fine tank has been constructed, about five feet deep, and broad enough to swim in; into this a copious stream of water pours continually, so hot that a bare hand or foot cannot endure it: the water is pure and quite tasteless. Into the bath, and close to this hot stream, a rivulet of water from a cold spring has been made to run, to moderate the temperature as may be required. A few ruins were scattered about; but the whole place was neglected, and, for the most part, disgustingly dirty. In any other country, this place would have been the resort of thousands, but here nature does her best, and man his worst, in all things. These baths derive their name from the wounded soldiers of Agamemnon being directed hither for cure by an oracle, while he was

engaged in the conquest of Mysia.

17

head

dim

Cen

acro

fron

hav

vers

star

folle

con

line

ree

its

The

froi

pre

sai

cor

sifi

gra

BCS

is Of

th

no bu

iŧ

Si Si

of

uj

to

it

m

te

ti

t

17th .- For the last two days, immense battalions of 'embodied cranes' have been returning over our heads, after another campaign against the Pigmies, the diminutive inhabitants of the mysterious regions of Central Africa. One division has no sooner passed across the gulf than another makes its appearance: from their clamorous exultation, let us hope that they have been victorious. Though high in air, their conversation is distinctly audible; and could we understand it, we should know much more of the source and course of the Nile or Niger than from any of the followers of Bruce and Lander; for these cranes have come from the marshes beyond the Desert beneath the line, where hippopotami wallow amongst luxuriant reeds, where the Niger loses itself, and the Nile draws its waters for the inundation of the land of Ham. They have peradventure seen Luxor and Karnac, Syria Palestine, and have returned to take possession of their old habitations, and to receive a welcome from their Mohammedan protectors. They warn us to prepare our summer clothing, and bid those proceeding to Odessa and the Cimmerian Bosphorus, to bend their sails and recommence their voyage. These birds are continually referred to by all the ancient writers.

ed

ıd

e

d,

RR

is

18

h

y

58

2.

le

ie

h

y

d

io

t

ie

e

h

h

d

ed

or

t,

18

re

le

e

h

rs

ot

to

of

to

g

The country about Vourla is very agreeably diversified with hill and dale, with rock and mountain; grassy plains and groves of olive and mulberry trees, the arbutus and the myrtle; brooks and fountains, scattered villages and cypress-planted cemeteries. It is a country of eternal verdure and perennial beauty. Of Clazomenæ, which stood upon the island in the bay, there are now scarcely any traces: the birthplace of him who preferred a grain of wisdom to a heap of gold, now seems unconscious of ever having sustained a city, but still does honour to their judgment who fixed upon it for a city's site. Vourla is chosen by the French and British admirals, when in the Archipelago, to water and refit at; the plague, that is never out of Smyrna, comes not hither; and it is well to windward the inbat,' which in summer blows all day strongly up the gulf, and against which no heavy ships can get to seaward. Now, however, as we are for Smyrna, let the inbat be our friend, and put our polacca before it: she sweeps along so steadily as scarcely to seem to move, while anchored vessels, 'towers, and towns, and woods,' appear to pass her westward-bound, and in hot pursuit of one another. Studding-sails and royals are now fluttering upon the heated gale; in they come together as though the wand of a magician had simultaneously wrought it; and now her topsails are down in an instant, and now she swings to her anchor as the interminable chain-cable thunders through the smoking hawse-hole: we are at Smyrna.

19th.—The rides about this place are intensely interesting; we traverse plains the finest in the world, skirting the bases of mountains the most famous in classic poetry, 'the solitary hills of shaggy Sipylus,' whence Niobe still pours her rivulets, Mount Tmolus ever fronting us; or we traverse the same route as that of Gyges, king of Lydia, or, in ages less remote, of the flerce Tamerlane.

Here we meet everywhere the black tents of the Turkomans; they shift about from place to place, according to the necessities of their flocks; carrying the young kids in their arms across the brooks, and such as are ill, in panniers upon donkey-back. We see caravans laden with iron about to penetrate the interior, and others, again, coming from that direction burdened with carpets and the merchandise of the East. These caravans are guided by women or men, each sex sitting in the masculine manner upon the ass, which always leads the string.

21st.—We have just returned from a visit to Ephesus, from a pilgrimage to the Holy Sepulchre of the Blessed Virgin Mary at that once celebrated city, where the fathers of the church sat in council to settle the

mysteries of Heaven and the faith of men. We started in the early morning from the sleeping city-Smyrnaand through the narrow half-covered bazaars, while the bat was still busy at his erroneous whirlings in the uncertain twilight, and the peaks of the Two Brothers were scarcely burnished by the sun. Over the hill, and through the cypress grave-yard, we watched the gulf grow brilliant, and the day break as it seldom breaks elsewhere. We were under the guidance of a surrugee, who took the lead, and accompanied by an Armenian interpreter, who would have made the fortune of a painter of national costumes, in his turban and furtrimmed robe of lavender-coloured cashmere, and mounted on his beautiful and gracefully managed steed. We met, too, groups of travellers almost equally picturesque; Turkish soldiers, bringing in hundreds of miserable creatures tied together, convict-like, with ropes, forced from their homes in the far interior to be disciplined for the service of the sultan, and converted into soldiers or sailors, as demand might require. Half an hour's canter further on disclosed a numerous retinue-officers splendidly attired in the old Turkish dress, and armed with scimitar, pistol, and yataghan; mounted also on strong and showy horses, richly caparisoned, they gave us a good idea of what Turks must have been in the palmy days of their ascendency. They were the body-guard of a bright gem within its casket-a beautiful lady, reclining in a sedan, was borne by mules amidst this train; beautiful, I say, and doubt not, though we caught no glimpse of her fair face. The ark that contained this precious freight was covered with scarlet cloth, and the number of mounted attendants proclaimed her to be a pacha's favourite wife, journeying probably, via Smyrna, to Constanti-Here, then, were two fine opportunities, had we but been Quixotically disposed.

We arrived, after some hours, at the ruins of Metropolis, whereof nothing now remains but some indications of an aqueduct, and the foundation-stones of enormous walls and edifices, aforetime doubtless the glory of their builders. Crossing the river Cayster by a ruinous old bridge, and after a long and fatiguing ride of nearly sixty miles, we came in sight of the castle of Aisaluk, the minaret of a mosque within its walls, and the lofty square abutments of that enormous duct which supplied the City of the Moon with the waters of Mount Pactyus, in times too remote to contemplate. As we approach nearer, we see the materials of which they were composed to be chiefly Roman bricks and cut stones, bearing evidence of having belonged to yet more ancient edifices. Here is a portion of the architrave of a temple, placed perpendicularly above a mass of the most various erections; there a Greek inscription inverted impresses us with the barbarity of the ignorant builders. Passing under the aqueduct, we followed a narrow pathway through the ruins of Aisaluk: broken pillars of marble and granite were scattered about on every side; stones with mutilated inscriptions, and such of the remains of a great city as by their strength bid defiance to timeand vandalism, in surprising quantity and confusion were heaped up everywhere. Here we see a brick-built mosque, supported by four exquisitely carved Corinthian pillars, three of gray, and the fourth of red granite; there, amidst the labour of Greek sculptors, stands a trough and fountain with some Saracenic writing—a medley of Greek, Roman, and Turkish masonry—standing and prostrate pillars, some whole, some broken; imperfect capitals and fractured architraves thrown about in the confusion of chaos-a picture of utter ruin and desolation, such as the pen can give no adequate idea of.

The inhabitants of this once populous and powerful city are reduced to a very few families of miserably poor, harmless, and oppressed Turks. At a wretched hovel we left our horses; and, while the frugal supper

was preparing, visited the celebrated mosque. The two red granite pillars, supposed to have been taken from the Temple of Diana, are of extraordinary dimensions; three of the tallest of our party could scarcely enclose one of them in their extended arms; they must be, therefore, eighteen feet in circumference, and at least five-and-twenty above the ground they stand on, and yet their bases are quite buried in the rubbish. The dome of the mosque is still complete, and still retains some of its painting and gilding, but the crescent is gone, and the shattered minaret threatens to scatter its fragments on those who dare to enter the olive-planted court where the Faithful used to perform their ablutions before prayers. This is the great building called by the missionaries the Church of St John. We ourselves contrived to take a bath in a sarcophagus, which a fountain perpetually keeps full of the purest water in front of the little khan, or inn.

After supper, induced by the freshness of the evening and the silver light of the great goddess of the Ephesians, I went forth among the ruins to smoke my chibouque and deliver myself up to the influences of the solemn scene. Forlorn, indeed, were the objects by which I was surrounded: the silence was unbroken, save by the mournful cry of the jackal amidst the hills and the fitful flitting of the bat and the night-hawk; Hesperus was burning in the west, above Mount Coressus, with surprising lustre; and overhead, Orion was sparkling as though it were freezing; Arcturus and the Pleiades were still 'wheeling unshaken through the void immense,' as in the days of the old bard of Midian, still burning in the same relative position after the long lapse of ages, new, and bright, and glorious, whilst around me were scattered in fragments the most stupendous efforts towards lasting durability that 'the short-lived reptiles of the dust of earth' could compass. The night air was chill and damp, and I returned to the khan sooner than I had wished. I looked in at an old brick vault upon my way, and found our poor horses still unsaddled, and with nothing for fodder save chaff and old straw; nor could I get anything better for them, nor persuade our attendants to take any trouble about the matter. All the inhabitants of Aisaluk—about six or seven people—were assembled at the khan with pipes and coffee; their place of devotion was near at hand, and at intervals they performed their ceremonies with great apparent sincerity, prostrating themselves on small pieces of carpet, and singing a kind of hymn. They offered me of their tobacco, but would not taste my brandy, nor even permit me to drink it out of their vessels. Before I had done smoking with the Turks, my companions had laid themselves down upon the bench, and were soon at rest. This I cannot do at an early hour, however fatigued, so I took up a book I had with me, and endeavoured to read. The Turks supposed me to be at my devotions after my manner, and did not break silence until I closed the volume. Immediately above where we lay, the 'temple-haunting martlets had fixed their procreant cradles,' and, mindful of the fate of Tobit, I covered my face with my handkerchief, and was soon in the land of dreams.

Morning had no sooner dawned, than the same party roceeded to view by daylight the ruins of Aisaluk and Ephesus. Ephesus appears to have originally been upon Mount Prion, and in the time of Alexander the Great, or his immediate successors, to have descended into the lower ground at its foot, where we find what remains of its ruins-utterly desolate, and without an inhabitant, 'swept with the besom of destruction;' and it was even in that state, perhaps, whilst Aisaluk, to which a remnant of the Ephesians retired, continued to be a thronged city. First, we visited a Turkish fort of the fourteenth century, in a dreadful state of disrepair, its vaults and tanks abounding in scorpions and other doleful creatures, and shunned by all in its neighbourhood: it is, however,

beautifully situated, about a mile from the Cayster, amidst a grand half-circle of mountains. Besides the mosque, the ruins of the old aqueduct, and the fountain aforesaid, there is not much to note in Aisaluk except the general wreck, or to admire, except the natural beauty of its site. Quitting that place, then, and crossing a low and swampy flat, we found ourselves

amidst the ruins of Ephesus itself. Our endeavour to identify the remarkable places of the city was far from satisfactory. Passing along the side of a hill about thirty yards above the level, we looked down upon what was the gymnasium; but the destruction has been too complete for certainty. Proceeding between the mount and the valley's enclosure on the south-west side, the vestiges of great remains were everywhere about us; broken pillars and chiseled marbles, remnants of arches of brick and stone, gigantic foundations, bridge-like passages; but what they might have been, what now remains to tell? We next ascended the hill to see the Acropolis wall, and to look into the mighty quarries which supplied the Ephesians with their marble for the adornment of their temple and public buildings. It is frightful to look into these from the overhanging rocks above, which seem to have been shaken and separated from those with which they were once connected by a dreadful convulsion of nature, and to require but another shock to hurl them into the excavations beneath. These spread into enormous dripping-caverns beneath the hollowed mount. The remains of the Acropolis consist of enormous walls of the last or more regular order of cyclopean masonry, forming a citadel, perhaps, to the town at the base of the hill; one of these walls runs right across from east to west, built of huge square stones, smoothed towards the south, but within all rough and unhewn. We passed over many old foundations and blocks of well-cut stone, and on reaching the northern side of the hill, which is very steep, we looked right down upon all that remains of Ionia's former glory. Descending from this, we found ourselves in the Theatre, choked up with stones and brambles. The only living thing within it, which we shot, was a small ant-bear, whose skin was useless through its myriads of vermin. Here lay scattered many finely fluted pillars of white marble, incrusted with a short dry moss, which time had set upon them as they lay upon the earth: their capitals were very large and beautifully carved. We wound through narrow passages, between walls of thirty feet in height, of tremendous thickness, and descended by many steps into a considerable vault. After a time, we got tired of exploring it with torches, and, indeed, it seemed to have no end. It was in this identical place that the Seven Sleepers are said to have taken that long nap of theirs. Coming to light again, our attention was next drawn by a fair archway, leading up to a large circular eminence, flat at the top, with a rock in the centre, four or five feet higher than the level, and cut all round with niches. An oblong square, sufficiently enormous to contain any number of sightseers, with sloping sides, next discovered itself: this was the theatre for the games and combats of wild beasts and gladiators. It was here that Demetrius, the silversmith, harangued his fellow-citizens when he found his occupation suffering through the preaching of St Paul. Immediately opposite, is the groundwork of some gigantic building, far larger than any of the rest, built of large blocks of shapen stone: this is all that now remains of that wonder of antiquity, the Temple of Diana at Ephesus. It rests upon great arches, and underneath are long large magazines, supposed to be places for keeping wild beasts in for the theatre hard by: they are of unknown extent. We went into some of the outside vaults, but were soon stopped by rubbish and darkness. I said there were no inhabitants in Ephesus, but must retract that statement; in one of these vaults, by a small TH

cen

the

agr

rer

wi

fac

the

na

ea

hi

of fir

in al

m

ti

to

i

smoky fire, we found a solitary and very old man, who expressed neither surprise nor gratification at the sight of visitors.

T,

in pt

nd

68

ng el,

ut

y.

at

ut

to

is

he

is

by

ut

ns

ns

he

re

ut

ny

on ry

nd

we

ed

m

to

he

of

xt

ar

It

ly

at

ng ild

VI

iid

### THE CARBONARI.

This word, so significant of mystery, crime, and power, is the distinctive title of a secret society or order, of whom, notwithstanding their own desire to prove a descent from the Templars, we find no mention in history until the close of the fourteenth century; when we read 'that the necessity of mutual assistance induced the charcoal-burners who inhabited the vast forests of Germany, to unite themselves against robbers and enemies.' Isolated from the rest of mankind by the peculiar nature of their toil, which removed them, as it were, from the great confederacy of social life, these colliers or burners, though born with the same feelings as other men, were yet cut off from all the ordinary privileges of humanity. The faculties with which God had endowed them were left unfolded and untaught, and darkness covered their hearts and understandings, until it became a humiliation to contemplate the depth to which human nature may fall when man is bowed down to the earth in the power of his prime by fruitless labour; and his only possessions are the memories with which his heart is stored, of long and hard endurance, of wretchedness and toil, oppression and wrong. In the same forests with the charcoal-burners dwelt hordes of robbers, many of whose acts of fearful cruelty we find on record; but they and the colliers had nothing in common save their local habitation. The grave alone could have kept them more apart than did their mutual jealousies and dislikes. Notwithstanding this, however, an instance at last occurred in which the robbers, in their insatiable desire for plunder, forgot the cautious policy they had heretofore observed towards the burners, and breaking into their enclosures, carried off some valueless booty. This infringement of a tacit agreement of mutual avoidance aroused the bitter anger of the charcoal-burners, and every feeling of their perverted and degraded nature was gathered into one strong and keen desire for revenge.

It was on this occasion they formed themselves into an association, and bound themselves by an oath, known afterwards as the 'faith of the colliers,' to seize every opportunity of attacking and destroying the robbers, until not one should find a shelter for his head in all the forests of Germany. In a short time their repeated victories made them aware of their power; they felt that their fierce strength as a body was irresistible, and with the conviction came also the instinctive desire, not only to exterminate the plunderers, but to emancipate themselves from the dishonouring slavery of their condition. They had long pined under the hardships of severe forest-laws, the partial repeal of which they had often vainly petitioned for; now, they demanded their total abolition, declaring death the penalty in the event of a refusal. Their demand was granted. Naturally regarding this first triumph over a reigning prince as the first-fruit of what was to come if they remained united, they determined on framing a code of laws, to which all should swear implicit obedience. They next divided themselves into tribes, each tribe agreeing to meet at stated periods at a lodge; and they then assumed the title of the 'Car-bonari.' Over the whole society one member presided, he was chosen by lot, and was bound to meet the heads of the tribes at stated periods in the lodge, which was situated then in the gloomiest depths of a forest. At first, these lodges were but assemblages of ferocious men, whose lives had been passed in degradation and oppression, and from whose weary hearts excess

of toil and poverty had dried up the well-spring of kindly feelings and affectionate desires, leaving behind only such flerce passions as incite the lower animals to supply the necessities of their physi-cal wants and those of their offspring, and to rush upon and destroy whatever threatens them with

In the course of time, however, the character of the Carbonari underwent a great change. The severe necessity for unremitting labour was removed by the abolition of the forest laws, and the men had a release from the chain which bound them to toil and sickness and a scanty morsel. The natural consequence was, that the more they felt removed from physical want, the more elevated became their moral character. The laws and constitution of the order were remodelled; and although they were then, and are still, deeply tinged with fanaticism, yet they are framed with such artful policy, that one can hardly wonder at the rapid progress the order made to wealth and power. In less than a century after we read of its first organisation in the forests, we find that it has spread over Germany, France, and the Netherand enrolled among its members persons of the highest rank. But in the present century, the greatest field of the society has been Middle and Lower Italy.

The form observed on the reception of a member was very absurd, though, no doubt, the young aspirant considered it deeply impressive. The aspirant considered in deeply impressive. The clandidate was styled a 'pagan,' and was led blindfold from the closet of 'reflection' to the door of the 'baracca,' by the 'preparator' or preparer, who affected to knock with mysterious irregularity. The copritore, or coverer, on hearing these sounds, turns from where he stands inside the door, and addressing his assistant-copritore, says: 'A pagan knocks for admission.' The assistant repeats the same to the chief door-keeper, who in turn repeats it to the grand-master, and at every communication the grand-master strikes a blow with an axe.

Grand-master: 'See who is the rash being who

dares to trouble our sacred labours.'

This question having passed through all the officials to the preparator, he answers through the opening of the door:

'It is a man whom I have found wandering in the forest.

Ask his name, country, and profession, commands the grand-master through his officials. The replies being instantly returned, the secretary

rites them down.

'Ask him his habitation and his religion.'

The secretary notes each reply.

'Ask him,' again commands the grand-master, what is it he seeks amongst us.'

The preparator replies: 'Light, and to become a member of our society.'

'Let him enter,' are the words which next pass slowly and solemnly from lip to lip.

The pagan is then led into the middle of the assembly; he is again questioned, and his replies are compared with what the secretary had previously written down. The grand-master then puts the following questions directly:

'Mortal, the first virtues we require are frankness and courage. Do you feel that you are capable of practising both, to the utmost?"

The pagan replies; and the grand-master, if satisfied, continues by questioning him on morality and benevolence. He then inquires whether there is anything of which he would wish to dispose, or if there is any domestic concern he would desire to arrange, as he is at that moment in danger of immediate death. If pleased with the answers and demeanour of the aspirant, the grand-master continues:

'It is well. We will expose you to trials in which you will discover a meaning. Let him make the first journey.'

The candidate, who is still blindfold, is then led out of the baracca, and caused to journey through the

forest.

At first, the silence is unbroken; he seems to be in a vast desert, alone. The grass beneath his feet is tangled and damp, and the air he breathes is heavy and noisome. He brushes, in his devious course, against the arm of a tree, and the next instant the wild cry of a bird, as she rises from among the branches overhead, fills the air. His feet are becoming entangled in underwood, and the crackling noise, as he breaks weakly through, sounds strange. At length, a light breeze comes whispering amongst the leaves of the forest, making low mysteri-The candidate's mind is becoming ous music. oppressed with strange wild thoughts-in silence, in solitude, in darkness rendered thick by the bandage, he is groping his way alone. He no longer hears the rustling of the leaves, for there is a sound of rushing waters in his ears-the struggle is becoming fearful between his imagination and his judgment; for a moment the regular healthy pulsations of his heart cease, and then comes the thick heavy throb of intense suspense and anxiety. At this moment, the preparator -whose tread, though close, he had not heard-lays hold on him, and leads him back to the door of the baracca, where the same form as at first is again repeated before he is admitted to the presence of the grand-master. He is then questioned as to what he had encountered in his first journey, and having related all, the grand-master replies:

'Your first journey is the symbol of human life. The obstacles you have encountered, and the noises you have heard, indicate to you that in this vale of tears you will meet many difficulties and distractions in the path of virtue, and that you must struggle through and disregard all, if you would arrive at last at the goal of happiness. Let him make the second

journey.

The candidate is then led away, and having been made to pass through a fiery ordeal, is shewn what appears to him a human head newly severed from the body. The bandage, which had been for an instant removed from his eyes, is replaced, and he is once more conducted to the baracca. Being admitted as on the former occasions, the grand-master tells him that the fire through which he had been made to pass was symbolical of the flame of charity, which should ever be alive in his heart towards every worthy individual; that the head was that of a perjurer who had just been punished. He then commands the preparator to lead the pagan to the foot of the throne, and when this is done, he asks in a slow, impressive manner:

'Are you willing to take an irrevocable oath, which neither offends religion, nor the state, nor the rights of individuals? Forget not, before you swear, that the penalty of its least violation is death.'

The pagan, having signified his willingness, is made to kneel on a white cloth, and to promise and swear on the statutes of the order, scrupulously to keep the secret of the carbonari, and neither to write, engrave, nor paint anything concerning it without having obtained a written permission. He also binds himself to help each member of the order under all circumstances, by every means in his power-never to attempt anything against the honour of their families; and, finally, he declares that he willingly consents, should be ever be guilty of perjury, to have his body cut in pieces, then burned, his ashes scattered to the winds, and his name held up to the execration of the carbonari throughout the earth. After this, he is led into the centre of the apartment, the members

present form a circle round him, and the grand-master demands:

'What do you desire, pagan?'

'Light.'

'It will be granted to you by the blows of my

CR

€0

fr

co

in

TE

bi 1

tl

C

th

ei

ir

ir d

b

t

H

t

0

0

P

t

C

0

The grand-master strikes with the axe, and the action is repeated by each of the carbonari. The bandage is then suddenly removed from the eyes of the candidate, who sees a circle of gleaming axes raised above his head, and hears thundered in his

ears by the grand-master:

'These axes will surely put you to death, should you ever, even in the least degree, violate the obligations of your oath. Do not hope to conceal yourself-in the dens and caves of the earth, you will meet the carbonari. Do not expect to avoid your doom by flight-at the utmost bounds of this globe, a member will confront you. If you sin-die; you will then have sought the only refuge from which the arm of the carbonari cannot snatch you. On the other hand, if you are faithful to the end, these axes will be raised in your defence, should you ever need them; and you may pass through life with the conviction, that in every peril, need, or difficulty, you shall ever find yourself in, you have but to look to the right hand or the left, to meet friendly and efficient help. And now, in the name and under the authority of our founder, and in virtue of the power which has been conferred on me in this honourable vendita, I make, name, and create you an apprentice.'

The grand-master then instructs him in the secret words and touch, and being congratulated by all the assistants and apprentices present, the vendita is

dissolved.

What the objects of this order were, when it was first instituted, we have already shewn; what they afterwards became, we learn from the following oration delivered in a vendita at Naples, during the

usurpation of Murat:

'Know, finally, that the object of respectable carbonarism is to restore to the citizen that liberty and those rights which nature bestowed on us, and which tyranny itself did not deny us. To attain to this object, it is necessary to try the virtue, and to consolidate the union of courageous and exemplary citizens: this is no trifling labour, since the cunning of political tyranny has interposed a thick veil between men's eyes and the sublime light of truth. Wretched mortals study those false maxims which, leading to prejudice and superstition, envelop them in darkness, and induce them to lead a life of slavery and submission to ill treatment, blind to the origin of their misfortunes. O men! do you not hear the clank of the chains with which you are bound? They are fastened upon you by the tyrant.

By the law of nature, he who seeks to destroy, should be himself destroyed. And are not kings, who, forgetting that they are men, proudly regard themselves as superior beings, and usurp the right of disposing of the blood of their fellow-men, and of looking upon them as slaves, are they not the lords of the wives and children, and possessions of these slaves? And yet honour, and homage, and respect, are still paid to these infernal monsters! O blind-

ness of man!

But as the maxims of the carbonari are founded on the simple principles of nature and reason, and on the doctrines of the gospel, it belongs to them to overturn the throne, raised by fanaticism and ambition, and to expel from it the monster who pollutes the whole creation. The blood of so many innocents, torn by main force from the bosoms of their families, and sent to perish in capricious wars; the blood of so many illustrious citizens slaughtered for speaking the language of truth-this blood, I say, calls on us for vengeance; and the number of our friends now groaning in fetters claim our assistance. Yes, the carbonari, knowing what truth and justice are, and possessing humane and candid hearts, will one day vindicate the rights of man. Having found your conduct to be regular and zealous towards the order, we have admitted you into the chamber of honour; that is to say, among the sworn members of the republic. You are come here to tender your lives for any service, when the carbonari shall invite you to save your

country from oppression.'

f

n

e

I

t

d

e

The alta vendita in which this oration was delivered was composed of honorary members and of deputies from each particular vendita. It was declared to be an administrative and legislative body, and a court of council and of appeal; and it was accordingly divided into different sections. It was the business of this vendita to grant charters of organisation to new lodges, or to confirm such as were submitted for its approbation. A regular system of correspondence was, in 1814, established between it and all the provinces of the kingdom; and it is said that the number of carbonari increased during that year with such astonishing rapidity that they were counted by tens of thousands. The whole population of many towns enrolled themselves, and entire regiments most willingly joined. Magistrates were compelled to enter, in order to obtain anything like obedience to their decrees; and all who were unprotected, were glad to become members, in hopes of support in the vicissi-tudes with which they were threatened. Those who were of a more enterprising turn rejoiced at finding themselves exalted into judges on the great questions of the nation; and imagined themselves the defenders of the injured and oppressed.

Murat was in some degree aware of the state of public feeling; but neither fearing personal danger, nor doubting the stability of his throne, he merely thought it necessary to endeavour to intimidate the carbonari by employing against them an active system of police. As it is a historical fact, however, that Maghelli, a native of Genoa, was at the same time director-general of police under the usurper, and organiser of the Papal States under the Carbonari, it will be readily believed that he did not divide his

services, and that Murat was not the master to whose work he put his strength.

In 1815, the French dynasty in Naples was at an end; the Austrian army was advancing; Ferdinand was about to reascend the throne: it was the Carbonari who brought back the king.

# ENCOUNTER WITH A BEAR.

Some years since, when serving with my regiment in Canada, I obtained two months' leave of absence, for the sake of enjoying some of the wild sports of the far west.

It was the commencement of the Indian summer, that 'moon' of glorious weather, when summer, seeming to regret the beautiful land she has left, revisits it for a brief season. Not a leaf had fallen from the trees but the brightest gold and crimson tints were flashing and glowing among their verdure; the wild bines and briers were covered with berries of scarlet, and ruby, and orange, almost as brilliant as their departed blossoms. Sweet-scented Indian-grass, studded with thousands of flowers, made gay the juniper copse; and their mingled perfume came floating to us across the smooth lake, as we threaded the labyrinth of the Christian Islands, which are said to number thousands.

to number thousands.

Once clear of the archipelago, we raised our blanket-sail, and stretched out towards the head of

the lake, merely landing to cook and sleep, for, only less than myself did my two Indians long to reach the haunts of the deer and the moose, and the far-off land of the bison. How I waged war against them, matters not to my present story; suffice it to say that I was successful, and that my leave was drawing to a close ere I again turned my face towards the colony, laden with trophies sufficient to make me the envy of any sportsman.

Small and light as my canoe was, it had to be abandoned when we left the lakes, and my tent had to be left also, being too heavy to carry with us; in fact, our equipment soon dwindled down to a blanket and waterproof wrapper each, and a few cooking utensils. Thus, when we again struck Lake Huron, which was at its south-west extremity, we were without a boat of any kind; and had we still possessed our old canoe, it was too small to have been of service in the wild inclement weather which had now set in, for it was the beginning of November, and the ground was covered with snow; though the lake was not frozen over. I therefore resolved to continue our route on foot to the Sault de St Marie, at the entrance of Lake Superior, where I hoped to obtain a larger canoe and additional boatmen; but on our way there, we encountered a fur-trader's bateau, bound to the lower end of the lake, and I engaged passages in her for myself and my Indians.

for myself and my Indians.

A flat-bottomed lumbering barge was my new conveyance—very different from my swift, graceful canoe; yet she bowled merrily along when the wind favoured her; and when it was contrary, progressed heavily beneath the influence of long sweep-like oars, wielded by the stout arms of half-a-dozen Canadians, who beguiled their labour with soft monotonous songs, which, with the murmur of the waves, floated round us like the music of a sea-shell. When our day's voyage was over, and, in the darkening twilight, we brought our boat to land, and tied her to the boll of a tree, more boisterous strains rose round the gipsy fires that were thickly lighted along the shore, and continued unceasingly, mingled with the fizzing of frying-pans and the bubbling of coffee-pots, until all hands retired to the boat to sleep—all save myself; and to escape such a medley, I would willingly have submitted to greater hardships than, wrapped in my blanket, to sleep beside the fire left burning on the

beach

For the first two or three nights—probably in consequence of the unwonted inaction of the day—I lay awake for hours, enjoying the solitude and admiring the northern lights as they quivered above me in vivid coruscations. But, on the fourth night, I slept soundly; so soundly as to be unconscious that the presage of those brilliant streamers was being fulfilled, that the air was filled with snow, and that a furious storm was rushing through the primeval forest, breaking the young trees like saplings, and here and there casting down with a resounding crash some vegetable patriarch. Such an incident, occurring in my immediate neighbourhood, at length aroused me, and I was surprised to find myself warmly enclosed in a bank of snow. I looked around, but the snow-curtain hid everything from my view, save the fire, which had not yet succeeded in consuming the huge logs piled upon it; so I lay down again, and despite the tempest, slept tranquilly until

When I opened my eyes again, the sun had risen, and was shining out from the clear blue sky. I started up, and shook myself free from the snow, hunter fashion; but what could equal my surprise and consternation when, looking towards the lake, I saw nothing but blue rippling waters! Not a vestige was visible of the bateau, which I had last seen lying by the shore, save a broken fragment of rope round the tree from which

she had broken loose in the storm, and then floated out from land with her sleeping crew, leaving me

alone in the wilderness. Alone-without resources, without a guide, I stood in that vast solitude, hundreds of miles distant, most probably, from any human being, ignorant even of so much of forest-lore as was required to tell me how I had best bend my steps. But for a hope that the bateau might return for me, I should have been overwhelmed by despair. That thought upheld me; and all the hours till nightfall-and that November day was the longest I ever knew-I sat watching with straining eyes for the returning boat. The setting sun left me still a watcher, though no longer hopeful; and by the time the stars shone out in the sky, I had begun to realise the fact that, under Providence, it was on my own exertions alone I must depend to save me from perishing in the wilderness.

That night I sat beneath the aurora, seeking not to

sleep, but gazing moodily into the fire, reflecting on what was to be done, while I grasped tightly my rifle, the only friend left to me, save the knife and revolver in my belt. The only plan I could decide on was to turn to the eastward, and travel along the shore, contenting myself with the certainty that, however slowly, I should at least be advancing towards the colony; and as soon as the dawn spread over the sky, I rose to commence my solitary journey.

As I turned to leave the spot, something glittered darkly on the ground: it was a tomahawk; and I raised and placed it in my belt, with deep gratitude for this timely gift of Providence. It would have gone ill with me in the inclement weather which the storm preluded without that tomahawk to chop wood for the fires that warmed me in those nights of intense frost, and cooked the venison and partridges I shot for food, as I toiled wearily on my way, coasting the promontories and bays, lest I should get out of sight of the lake, and so completely lose my way.

For four days I travelled on, while each day was

colder than the last; and on the sixth day, a violent snow-storm overtook me on an open plain. For some time I struggled blindly against it, in the effort to gain a place of shelter; but it was of no use; and in the end I was glad to erouch in the lee of a solitary dwarf-fir, and wrapping myself in my blanket, let the snow form a hillock over me. This covering, so cold in itself, imparted warmth to me; and I was soon in a deep dreamless sleep, from which I did not awake until next morning.

Oh, how stiff I was when I awoke!-so stiff and numb I could scarcely creep out of my snow-bower; and when I attempted to rise to my feet, I fell on the snow again in indescribable agony, which I soon found to be the result of both my feet being frostbitten. Few are long in that climate without learning what is needful to be done in such an emergency, and I at once began to rub my feet with snow; but it was with a heavy heart, for if I was disabled, what was to become of me in that desolate spot?

At length, as if by instinct-for hope had deserted me long before—I went forth on my journey, a miserable cripple, leaning on my rifle, and on a stick that at each step sunk deep into the snow, and with my suffering feet wrapped in the fur of the hares I had killed.

In this way I dragged myself slowly along, until night came, when I sank down utterly exhausted, unable to bestow upon myself any of the care I stood so much in need of. All I could do was to seek a commodious sleeping-place-that is to say, a sheltered thicket, with an open space in front for my fire. One evening, I esteemed myself fortunate in finding a cave, which a mass of brushwood at the entrance had kept free from snow; the air inside was so warm that it was positively luxurious; and while

busy making a fire before it, I resolved on remaining there a day or two to recruit.

The very idea was refreshing; and in unusual spirits I skinned a hare I had shot during the day, and placed it, hunter fashion, on two sticks before the fire. Scarcely was it placed in this torrid zone, when something between a grunt and a groan seemed to intimate its dislike to its new position. I started; and in the horrible doubt whether I had not committed the barbarity of flaying and impaling a living animal, I stretched out my hand to withdraw it from the fire, when another grunt, unmistakably behind my back, caused me to look round. But nothing was visible in the deep dim cavern save the carpet of dried leaves which the autumn winds had swept into it; and concluding there was some cranny in my new domicile through which the wind came grumbling down, I addressed myself to my roast.

te

in

h

8]

C

C

I

q

t

The next moment, an undoubtable growl, so deep and fierce that it echoed through the cave, startled me to my feet; and I turned to find myself closely confronted by an enormous grizzly bear, the most fearful animal of the American wilds. How ferociously his eyes glared on me from under his shaggy brows, as he opened them from the new-fallen sleep, which the warm beams of my fire had dispelled, and how convulsively his huge jaws worked and quivered in eager longing to devour me! Ere I had time to snatch the revolver from my belt, the gigantic beast rose toweringly above me, and opening his enormous paws, pressed me to him in close embrace-so close, that my arms were pinned to my sides, and my very bones seemed to crack in that vice-like hug. I believe I seemed to crack in that vice-like hug. I believe I screamed with the sudden agony, but the sound was lost in the deep-mouthed growls, like muttering thunder, that filled the cave.

Weak and exhausted as I was, I felt myself unequal to cope with the powerful beast in whose grasp I was; but even if life were little worth to a solitary such as I, this mode of death was so horrible, that it nerved me to efforts beyond my ordinary strength, and somehow my hand managed to creep up towards my belt. But ere I could reach the weapon I sought, a movement of the bear had loosened it, and firing a single barrel, it fell to the ground among our feet. The report echoing through the cave, alarmed my adversary; and with a more threatening growl, he clasped me closer, and for the first time his claws penetrated my clothes, inflicting terrible wounds.

But my hand had met an unexpected friend in my knife, which I had unwittingly thrust into my belt, and with it I inflicted several random stabs on my This, however, seemed only adding to antagonist. antagons. Ins, however, seemed they acting my own sufferings; for, maddened by the pain, the bear threw himself on the ground, and rolled over with me in his agony, while his huge teeth munched and tore at the blanket which a fortunate fit of toothache had made me wrap round my head. Not that that or any other earthly matter seemed likely to concern me long, for the strength of excitement was already passing, a strange murmur was mingling in my ears with the fierce growls of my enemy; and the pain of his claws changed into a vague yet universal agony, as consciousness and life were being pressed out in that terrible hug.

Suddenly a sound echoed through the cave, so sharp that it reached even my failing faculties, and appeared to thrill likewise on the nerves of my foe, to judge by the increased emphasis of his embrace; but the next instant he relaxed his hold, and sank helpless on the ground beside me, his almost insensible victim.

My first sensations as I revived were of burning pains all over my body, and exceeding cold in my hands and face; and I opened my eyes to find a young Indian bending over me, and rubbing me with snow. Passing near the cave, he had seen my fire, and heard the report of my revolver, and hastened to see what was the matter, just in time to save me from a miserable death and a revolting sepulchre. All night long this good Samaritan sat beside me, tending the gaping wounds through which life threatened momentarily to escape; and when morning broke, he left me for a short while to go to his village—which was scarcely a mile distant—for help. In one of the lodges of that Indian hamlet I passed the remainder of the winter, prized and tended as if I had indeed hear the Abent's that and tended as if I had indeed been the 'brother' that in their stately yet kindly courtesy they styled me. Thanks to their skill in forest simples, my wounds healed marvellously; and when the sweet breath of spring broke the ice-fetters of the lakes and rivers, I was sufficiently recovered to embark in my preserver's canoe, the skin of my defunct foe forming a luxurious couch.

ning

sual day,

fore

one.

med

ted;

ving rom

hind

Was

t of

into

my

ling

deep

con-

rful

his

, as

the

con-

in atch

rose

aws. that

ones

ve I

was

ring

qual

sp I

tary

at it gth,

ards

ight,

ng a

feet.

my

he

, he

my

belt,

my

g to

the

over

ched

oth-

that

y to

was

gling

and

uni-

eing

, 80

and

foe,

ace;

sank sible

ning

my

d a

with

My return to the land of civilisation something resembled that of a spirit to the land of the living. I will not say my place had forgotten me; for I had no longer a place, since my lieutenancy, my quarters, and my uniforms had other occupants; and very loath the tenants were, especially that of the first, to admit the fact of my resuscitation.

#### THE BOAT-FLIES OF MEXICO.

THE boat-fly or water-bug\* derives both its names from its well-known habit of turning itself over on the water like a boat, and so swimming about, with its head downward. It abounds amongst our ponds and ditches, and may be readily observed, though not readily caught there, during the day; but at eve it rises into the air and flies away in search of food, which it finds either by making prey of smaller insects, or by parasitically attacking the larger animals, after the manner of other bugs. When you succeed in catching one-no easy matter-most likely it will thrust out its beak into your hand, and there leave an irritating poison, the effects of which, however, soon pass off.

The fact of these insects swimming upon their backs is a remarkable peculiarity in their history; indeed, no other entomological tribe presents this peculiarity, which thus serves to distinguish, at a glance, a member of the Notonectide from any other aquatic or land insect; and, although the greater part of their life is passed under water, their bodies, like those of the water-fowl, never get wet, for they are more or less completely covered with very minute hairs or bristles, which imprison-at least, on the surface of the wings upon which they swim-a sheet of air, and effectually prevent the immediate contact of water with the body of the insect. Nature has provided for most aquatic insects in the same way.

Such are a few facts relating to our English species of boat-fly; but, in Mexico, we find other varieties of these water-bugs, which will furnish us with the occasion of noticing some very curious phenomena. But to do this, we must soar for an instant from the entomological kingdom into the domain of geology.

Our readers are doubtless acquainted with the oolite limestone. In the British Museum, and at the Jardin des Plantes of Paris, likewise in several provincial collections, are to be seen some magnificent specimens of this remarkable rock and its many

varieties. It is immediately distinguished from any other description of rock or stratified earth by the presence, in its mass, of innumerable spherical nodules, varying in size from that of a millet-seed to that of a marble, from which, indeed, the name oolite has been taken-Greek, oon, an egg, and lithos, a stone-as being a rock composed of eggs, or an egg-rock.

How have these oolitic rocks, which differ so much from all the others, been formed? This question has puzzled geologists, chemists, mineralogists, paleontologists, &c., ever since oolites were first observed. Some have seen a grain of sand rolling along the calcareous bed of a trout-stream, gradually cover itself with a crust of limestone, and, rolling still, soon present the aspect of an isolated colite. To these sporadic nodules, the name of Pisolites has been given. Is it, then, in the agglomeration of these pisolites that must be sought the explanation of oolitic structure? Others have seen pisolites form in the interior of steam-engines, when certain substances have been introduced to prevent the calcareous matter contained in the water from depositing upon the sides of the boilers; and they have concluded that pisolites could be formed in thermal or hot mineral springs as well as in streams. It was observed that these nodules are easily cemented together by water holding cal-careous or other mineral matter in solution, and it was consequently supposed, pretty generally, that pisolites may have given rise to the peculiar structure of the oolitic beds observed in nature.

But now comes another and very ingenious theory respecting the origin of oolite—here, at the commencement of the present year, we have two observers who look upon these rocks as having an organic origin! Mr Bowring and M. Virlet d'Aoust think —indeed, have apparently proved by direct observa-tion—that the colitic globules have been, and are still formed by an incrustation of carbonate of lime deposited upon the eggs of certain water-insects, belonging to the family of the Notonectidæ, or boat-flies.

A paper has lately been read at the Academy of Sciences at Paris by M. Virlet, in which he endeavours to prove, not only that colite must have been formed in very ancient, anti-historic times, from the eggs of similar aquatic insects, but that the same wonderful cause of rock-formation is extremely active in Mexico at the present time.

However extraordinary this origin of oolitic limestone may appear at first sight, we must not be too hasty in rejecting altogether the statements brought forward by the above-named author. Has not Dr Ehrenberg shewn that immense masses of the earth's crust owe their origin to a profusion of microscopic Infusoria and Foraminifera?-and, Mr Rupert Jones, has he not discovered that great portions of the sur-face of our globe are strewed with Entomostraca small crustaceans (formerly taken for bivalve mollusca) resembling our little water-fleas (Cyprida)? Has not Dr Bowerbank ingeniously demonstrated that flints and moss-agates are nothing more than petrified or fossil sponges; and do we not know with certainty that a great part of the earth's structure is composed almost entirely of corals and shells? M. Virlet d'Aoust, in his turn, endeavours to shew that colitic rocks owe their formation to myriads of minute eggs, the seed of some aquatic insects. Here are the facts observed:

Every one has heard of the great plain of Mexico, situated some 7500 feet above the level of the sea, and from whence Humboldt brought back with him what was called an antediluvian man (homo diluvii testis), being neither more nor less than a large fossil salamander

<sup>\*</sup>The family of the Notonectidæ, as the water-bugs are called, belongs to the hemipterous section of the insect order.

belonging to the most recent fresh-water formations. Near the centre of this vast tract of land are seen two large lakes. The first of these goes by the name of Chalco; the second, near which some salt-works have been established, is called Texcoco. M. Virlet remarked that the bottoms of both these lakes are formed by a sort of gray limestone of modern formation, containing small colitic globules, which, in this author's eyes, are in every respect similar to those found in the limestone of the Jura. He immediately made known this fact to Mr Bowring, director of the salt-works at Texcoco, who informed him that these globules were owing simply to the incrustation of the eggs of water-insects by carbonate of lime deposited daily from the waters of the lakes.

In a second excursion to these lakes, it was observed that their banks were strewed, under water, with an infinite number of insects' eggs, about the size of a pin's head, and which appeared to belong to a species of boat-fly. M. Virlet is not only convinced that these modern colites of Mexico owe their formation to the eggs of these insects, but thinks, also, that the colite of the Jura and other ancient strata must be attributed to a similar cause. 'This would explain,' says he, 'the irregular distribution of colitic grains or nodles in the rocks of the Jurassic strata. Where the colite is found to be hollow, the egg which formed it has been enclosed before being hatched; where the colitic globules are completely solid, the eggs have had time to hatch, and the cavities left by the exit of the grubs (larva) have been filled up by the incrusting

calcareous matter.'

If these facts are confirmed by future observation, it will not be without interest that we shall recall the Greek origin of the word oolite. I would, however, on this occasion remind our geological readers that a small colitic bed, bearing great resemblance to the Jura limestone, was formerly discovered by Leopold von Buch, near Teguise, in Lanzarote, one of the Canary islands. This colite-bed is also, like that of Mexico, of modern formation, and probably continues increasing at the present day. It would continues increasing at the present day. therefore be of great interest to ascertain if the oolitic deposit made known to us by Leopold von Buch owes its origin to causes similar to those stated by M. Virlet in reference to the Mexican colite. Such an investigation, which could be made without difficulty by the English vessels which frequently visit the Canary Islands, would be more likely to decide the question than the examination of ancient oolites, with a view to discover some organic remains that might be attributed to the eggs of insects.

But the Mexican boat-flies, which appear to play so important a part in modern rock-formation, are important also in a truly practical sense, inasmuch as they furnish to man, and some of his domestic animals,

a plentiful supply of food.

The Mexicans consume at their meals immense quantities of the eggs of these aquatic insects.

Many authors have written more or less indistinctly on this curious alimentary substance, which is sometimes termed Mexican flour, animal flour, &c., or known under the Mexican epithet of haults. That it has been employed as food for a long time past, we learn from the fact that Thomas Gage, an ecclesiastic and a naturalist, who was travelling in Mexico in the year 1625, described the loaves and cakes that were then made of it.

Brantz Mayer, in a work called Mexico as it Was and as it Is, published in 1844, affirms that the Indians made use of this 'animal flour' long before

the conquest.

From the account left us by M. Craveri, who sent to Europe a certain quantity of this Mexican flour, and samples of the insects which produce it, the latter appear to be very common in the waters of the lakes

we have referred to above. In the lake of Chalco, the native Mexicans find a sort of reed (carex) they call touke, upon which the boat-flies lay their eggs in preference to other water-grasses. These reeds are made into bundles, and placed in the waters of the lakes; they are soon covered by millions of eggs. In about a month's time, the bundles are drawn out of the water, dried in the sun, and then shaken or beaten over cloths which are spread upon the ground to receive the eggs they bear. The latter, which in this operation fall from the reeds like rain, are ground down to a powder, passed through a sieve, and sold to the people in sacks, as we sell wheaten flour.

Recent observations made by several travellers, confirm anew the statements we already possess respecting this curious diet; and M. Guérin-Menneville, a French naturalist, has lately made known the exact species of boat-flies which produce the Mexican

insect-flour.

The principal manufacturers of it are two insects belonging to the genus Coriza of Geoffroy. One of these is the Coriza mercenaria—a species established and described as early as the year 1831, by Thomas Say, who discovered some of these insects on the market-places of Mexico. The other is a new species described for the first time by M. Guérin-Menneville, a few weeks ago, under the name of Coriza femorata. The eggs of these two species are seen fixed in countless numbers on the triangular leaves of the carex or reed employed by the natives to collect them. They are small, of an oval shape, with a slight prominence at one end, and a minute stem at the other; by means of the latter, they are attached to a small round disc, which the mother-insect secretes on the leaves.

Amongst these eggs, which lie very close, and are even seen fixed sometimes one on the top of the other, are observed some of a different description, considerably larger than the former, long and cylindrical, and which belong to a third species of insect that M. Guérin has described as a new species under the

denomination of Notonecta unifasciata.

Such are the remarkable facts we wished to make known concerning the boat-flies of Mexico. They would form interesting objects for the British Museum; and we hope M. Guérin-Menneville will not forget to send some fine specimens of both insects and eggs to London. These little creatures bear a certain resemblance to the less useful, but not less interesting inhabitants of our English ponds and ditches, of which we have already said a few words, and which are doubtless well known to our readers.

#### SONNET-THE SKY-LARK'S NEST.

Nor in secluded incense-breathing grove,
Nor tangled brake, nor coppice privacy—
Sweet haunts of nests fashioned so cunningly—
Weaves the bold sky-lark his retreat of love,
But on heath, marsh, or green, where cattle rove,
He scratches out a cupful of loose ground,
And straggling hay within the hollow wound
His humble nest completes. But oft above
From out the grass-fringed edge the daisy peeps,
And bends her golden eye o'er eggs or young,
And never seemeth half so fair as then;
So like sweet spirit to protect from wrong
The minstrel's home, exposed to eager ken
Of village boy, as through the grass he creeps.

J. E.

N

S

m

be

tl

d

tl

tı

n

8

g

t

1

a

1

0

Printed and Published by W. & R. Chambers, 47 Paternoster Row, Lowdox, and 339 High Street, Edinberghen. Also sold by William Robertson, 23 Upper Sackville Street, Dublin, and all Booksellers.